

## REMARKS

Reconsideration of the October 7, 2003 Official Action is respectfully requested.

Prior to discussing the issues raised in the Official Action, the undersigned hereby gratefully acknowledges the helpful suggestions made by Examiner Griffin during a telephonic interview on January 27, 2004. The substance of the interview is incorporated in the following remarks.

The specification was objected to as allegedly incorporating "essential material" by reference to a foreign application or patent. Specifically, the Official Action refers to the citation of French patent literature on page 6, lines 9-25. Two of the French patents listed on page 6 also appear on page 5 of the specification. With respect to these two French patents, the corresponding U.S. patents have been added to the specification. With respect to the remaining French patent (i.e., FR-A-1,108,011) there is no corresponding U.S. patent. However, it is submitted that the French patents listed on page 6 of the specification are proper since they are directed to nonessential subject matter rather than essential subject matter.

As explained in MPEP §608.01(p), nonessential subject matter is subject matter referred to for purposes of indicating the background of the invention or illustrating the state of the art. The discussion on pages 5-6 of the specification provides examples of how alumina employed for the catalyst according to the invention may be prepared. The claims of the present application are not directed to a process of preparing such alumina, but rather the claims are directed to the product itself. Accordingly, withdrawal of the objection to the specification is respectfully requested.

Claims 1-3, 7 and 11-21 stand rejected under 35 USC §103(a) as allegedly being unpatentable over U.S. Patent No. 4,364,858 ("Goodboy"). The reasons for the rejection are set forth on pages 3-4 of the Official Action. This rejection is respectfully traversed for the following reasons.

In the Official Action, the Examiner addressed the Applicants' rebuttal evidence in the form of the Nedez Declaration. In particular, the Official Action takes the position that:

"Regarding applicants' assertion that the catalyst provides unexpected results, the examiner argues that the data [provided] in the Nedez declaration does not appear to be commensurate in scope with the claimed invention. For example, claim 1 does not include many of the catalyst characteristics utilized in the declaration. Therefore, it cannot be determined if the any [sic] unexpected results are due to the sodium amounts or are due to other characteristics" (Official Action at page 4).

MPEP §716.02(d) is entitled "Unexpected results commensurate in scope with claimed invention" and explains that "the showing of unexpected results must be reviewed to see if the results occur over the entire claimed range" (Rev. 1, Feb. 2003, page 700-242). In the present case, the Nedez Declaration shows that the unexpected results are achieved over the entire claimed range and as such, the showing of unexpected results is commensurate in scope with the claimed invention.

In In re Grasselli, 713 F.2d 731, 741, 218 USPQ 769, 777 (Fed. Cir. 1983), the court held that evidence presented to rebut an obviousness rejection was insufficient to rebut the rejection because the experiments were limited to sodium and not commensurate in scope with the claims. Such is not the case in the present application wherein the claimed catalyst is directed to an activated alumina catalyst comprising a cocatalytically effective amount of sodium values expressed by weight

of Na<sub>2</sub>O ranging from 1200 ppm to 2500 ppm. The Nedez Declaration compares activated alumina catalysts having sodium values in amounts smaller than the lower end of the claimed range and higher than the upper end of the claimed range. Accordingly, the Nedez Declaration shows unexpected results for the very same activated alumina catalyst material cited in the claims and shows unexpected results over the entire claimed range. Accordingly, the data submitted with the Nedez Declaration is commensurate in scope with the claimed invention.

In paragraph three of the Nedez Declaration, the eight activated alumina catalysts are characterized as having various Na<sub>2</sub>O contents and other features including specific surface area, bead particle size, and pore volume of pores. Because all of the samples included the very same specific surface area, bead particle size, and pore volume of pores, it is submitted that such features do not contribute to the showing of unexpected results. That is, because each of the activated alumina catalysts differed only with respect to the Na<sub>2</sub>O content, the Nedez Declaration clearly establishes that it is the narrow range of the sodium values which provides the unexpected results. As such, it is submitted that the features of specific surface area, bead particle size and pore volume of pores need not be included in the independent claims.

In view of the foregoing, it is submitted that Claims 1-3, 7 and 11-21 are clearly patentable over Goodboy.

Claims 4-6, 8, 9, 22 and 23 were rejected under 35 USC §1039(a) over Goodboy in view of U.S. Patent No. 5,244,648 ("Dupin"). The reasons for the rejection are set forth on pages 4-5 of the Official Action. This rejection is respectfully traversed for the following reasons.

Claims 4-6, 8, 9, 22 and 23 depend directly or indirectly from Claim 1 and thus are patentable over the combination of Goodboy and Dupin for at least the reasons that Claim 1 is patentable thereover.

Claim 10 was rejected under 35 USC §103(a) as allegedly being unpatentable over Goodboy in view of U.S. Patent No. 5,242,673 ("Flytzani-Stephanopolous"). The reasons for the rejection are set forth on page 6 of the Official Action. This rejection is respectfully traversed for the following reasons.

Claim 10 depends from Claim 1 and thus is patentable over the combination of Goodboy and Flytzani-Stephanopolous for at least the reasons that Claim 1 is patentable thereover.

It is submitted that the differences between the claimed subject matter and the prior art are such that the claimed subject matter, as a whole, would not have been obvious at the time the invention was made to a person having ordinary skill in the art.

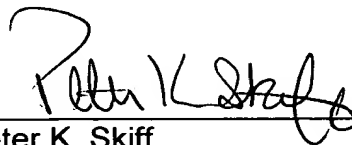
In view of the foregoing, it is submitted that the present application is in condition for allowance and such action is earnestly solicited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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By:



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Peter K. Skiff  
Registration No. 31,917

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620  
VA 55988.1